

### **REMARKS/ARGUMENTS**

The Office Action mailed November 1, 2004, claims 1-9 were rejected under 35 U.S.C. § 112, 2nd paragraph as being indefinite. Claims 1-3, 8-11 and 17-19 were rejected under 35 U.S.C. § 112(b) as being anticipated by JP10-148307, and claims 3-7, 12-16 and 20 are rejected under 35 U.S.C. 103(a) as being obvious over JP10-148307. Applicant has thoroughly reviewed the outstanding Office Action, including the Examiner's remarks and references cited therein. The following remarks and amendments are believed to be fully responsive to the Office Action. After entering the amendment, the claims currently pending in this application will be claims 1-3, 5-11 and 13-20. All of the pending claims at issue are believed to be patentable over the cited references.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. § 112**

Claims 1-9 are rejected under 35 U.S.C. § 112, 2nd paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. For example, the Examiner pointed out the phrase, "at least at times," as a phrase causing indefiniteness. Applicant has amended claim 1 to remove this phrase, and therefore this amendment obviates the Examiner's rejection under 35 U.S.C. § 112. Applicant feels the removal of the phrase, "at least at times," does not alter or change the scope of claim 1 or the claims depending from it. Therefore, claim 1 and its dependent claims are entitled to their full scope, both literally and under the doctrine of equivalence. Applicant respectfully requests that the rejections of claims 1-9 under 35 U.S.C. § 112 be removed.

#### **CLAIM REJECTIONS UNDER 35 U.S.C. § 102**

Examiner rejected claims 1-3, 8-11 and 17-19 under 35 U.S.C. § 102(b) as being anticipated by JP10-148307. Applicant respectfully traverses these rejections.

“The claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference.” *Verdegaal Bros v. Union Oil Co. of California*, 814 F.2d 628, 631. (Fed.Cir. 1987); MPEP § 2131.

Japanese reference 10-148037 does not teach or suggest every aspect of claim 1 and its dependent claims. For example, claim 1 recites a combination including, “A burner controller operably connected to the system controller wherein the system controller sends a signal to the burner controller to shut down the burner when the NOx emissions in the exhaust conduit are a first unacceptable level.”

The undersigned does not speak or read the Japanese language, and is left to review the figures and the translation of the summary provided by the Examiner. To the best of the undersigned’s knowledge, Japanese reference 10-148037 does not teach or suggest a combination, including a burner controller operably connected to the system controller, wherein the system controller sends a signal to the burner controller to shut down the burner when the NOx emissions and exhaust conduit are at a first unacceptable level.” Further, the Examiner, in the Office Action, on page 4, states that the Japanese reference does not disclose a means to shut down burners when the acceptable operating parameters are detectable. Thus, by the Examiner’s own admission, the Japanese reference does not teach or suggest all the aspects of claim 1 and its dependent claims. Therefore, Applicant respectfully requests that the rejections under 102, of claims 1-9, be withdrawn.

Claims 10, 11 and 17 were also rejected under 35 U.S.C. § 102, as being anticipated by JP10-148307. Applicant respectfully traverses these rejections. For example, independent claim 10 and its dependent claims 11 and 17 cite a combination, including, “data storing means operably connected to the system controlling means, wherein the system controlling means sends NOx information received from the NOx sensing means to the data storing means.” As far as the Applicant has been able to determine, the Japanese reference 10-148307 does not teach or suggest a combination, including a data storing means operably connected to the system

controlling means, wherein the system controlling means sends NO<sub>x</sub> information received from the NO<sub>x</sub> sensing means to the data storing means. However, as previously stated, Applicant's representative is not fluent in the Japanese language and is basing his determinations on the figures and English abstract of the reference provided by the Examiner. Because the cited reference does not teach or suggest all of the aspects of dependent claim 10 and its dependent claims 11 and 17, Applicant respectfully requests that the rejection under 35 U.S.C. § 102 of claims 10, 11 and 17 be, in view of JP10-148307, be withdrawn.

Claims 18 and 19 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP10-148307. Applicant respectfully traverses these rejections. For example, independent claim 18 recites, "determining if a recirculation valve should be one of open, closed and remain the same, according to a predetermined criteria." As far as the undersigned has been able to ascertain, JP10-148307 does not teach or suggest a method, including determining whether a recirculation valve should be one of open, closed and remain the same according to a predetermined criteria. In contrast, it appears that the English translation of the abstract provided by the Examiner indicates that there is no method of determining if a recirculation valve should be one of open, closed or remain the same according to the predetermined criteria.

In contrast, it appears from the English translation of the abstract, that the amount of the exhaust gas required for maintaining a temperature of a reheating device is controlled by a fan 14, which is controlled by a fan control device 23. Again, as previously mentioned, the undersigned is not fluent in the Japanese language and is making his arguments on the English translation of the abstract provided by the Examiner and by viewing the figures in the Japanese reference. Because JP10-148307 does not teach or suggest a method recited by claim 18 and its dependent claim 19, Applicant respectfully requests that the rejection under 35 U.S.C. § 102 of claims 18 and 19 in view of JP10-148307 be removed.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 3-7, 12-16 and 20 are rejected under 35 U.S.C. § 103(a) as being obvious over JP10-148307. Claims 3-7 depend from claim 1, which is shown to be patentable over JP10-148307 at least for the reasons stated above. Therefore, claims 3-7 are patentable at least by reason for their dependency from claim 1. Claims 12-16 are dependent upon claim 10, which has been shown to be patentable, at least for the reasons described above, over JP10-148307. Therefore, Applicant respectfully suggests that claims 12-16 are at least patentable by reason of their dependency upon claim 10. Claim 20 is dependent upon claim 18, which has been shown to be patentable over JP10-148307 at least for the reasons stated above, and the Applicant respectfully suggests that claim 20 is patentable at least by reason of its dependency upon claim 18. Therefore, Applicant respectfully requests that the rejections under 35 U.S.C. § 103(a) in view of JP10-148307 for claims 3-7, 12-16 and 20 be removed.

OFFICIAL NOTICE TAKEN BY THE EXAMINER

The Examiner took official notice and based at least part of the § 103 rejections based on the Official Notice that it is well known in the art to: "Shut down burners when the unacceptable operating parameters are detected in order to prevent unsafe or damaging burner operation; use celluloid valves as fluid control means; use a microprocessor with a memory and stored operating values as a system controller; system control means arranged to activate an alarm when system parameters are at an unacceptable level to notify maintenance personnel." Applicant respectfully traverses the Examiner's position that the items cited above are well known in the art and merit official notice by the Examiner.

In particular, Applicant rejects the Examiner's notion that the above ideas are well known in the art of hydrocarbon-fired burners and appliances for a method of reducing NO<sub>x</sub> emissions in appliances having a burner. For example, the one and only reference cited by the Examiner to reject the applicaiton, JP10-148037, does not teach or suggest any of these features. Because the

Examiner's cited one and only reference, it is assumed by Applicant that the one, singular reference cited by the Examiner is representative of the state of the art with respect to the claimed invention. None of the parameters are taught or suggested by the reference pointed out by the Examiner. It stands to reason that if none of these features are taught or suggested by the reference, they are not likely to be common knowledge in the art or well known in the prior art.

Applicant respectfully submits that the Examiner provide references outlining the features stated above, and, further, if the references are used in a § 103 rejection, the Applicant politely reminds the Examiner that to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves, or in the knowledge generally available to one of the ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claimed limitations. See M.P.E.P. 2143.

Therefore, a reference reciting the features described above supporting the Examiner to take judicial notice of does not necessarily establish a prima facie case of obviousness, but rather must comply with the three basic criteria cited above in order to do so.

CONCLUSION

In view of the foregoing remarks, The applicant respectfully requests that all the objections and rejections to the claims be removed and that the claims pass to allowance. If, for any reason, the Examiner disagrees, please call the undersigned attorney at 202-861-1792 in an effort to resolve any matter still outstanding before issuing another action. The undersigned Attorney is confident that any issue which might remain can readily be worked out by telephone.

In the event this paper is not timely filed, applicant petitions for an appropriate extension of time. Please charge any fee deficiencies or credit any overpayments to Deposit Account No. 50-2036.

Respectfully submitted,

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